

What is claimed is:

1 A method for identifying a price at which to
2 conduct a batch auction of a financial asset,
3 comprising the steps of:

4 accepting a plurality of order requests from a
5 plurality of sources, said order requests containing
6 orders representing a desire to trade the financial
7 asset within certain order parameters, a portion of
8 said orders optionally containing a desired order
9 parameter;

10 selecting the price at which to trade the asset by
11 examining said priced portion of said orders, including

12 determining from said priced portion of said
13 orders whether there exists a single price at which a
14 maximum number of shares of said asset will be traded,
15 and, if so, selecting said single price as a selected
16 price,

17 if there does not exist such a single price,
18 calculating an imbalance ratio of purchase requests of
19 said asset to sale requests of said asset, and
20 determining the selected price based on the result of a
21 comparison of said imbalance ratio to a predetermined
22 reference value;

23 exchanging a number of shares of the asset at the
24 selected price; and

25 allocating said number of shares among said order
26 requests.

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28 2. The method for identifying a price at which to
29 conduct a batch auction of a financial asset according
30 to claim 1, wherein said number of shares is a maximum
31 number of shares which can be exchanged based upon said
32 order requests.

1 3. The method for identifying a price at which to
2 conduct a batch auction of a financial asset according
3 to claim 2, wherein said maximum number of shares is a
4 factor for selecting the selected price.

5 4. The method for identifying a price at which to
6 conduct a batch auction of a financial asset according
7 to claim 1, wherein the selected price lies within a
8 range identified by a bid-offer spread of the asset on
9 a market for the asset.

10 5. The method for identifying a price at which to
11 conduct a batch auction of a financial asset according
12 to claim 1, wherein said order parameters include a
13 trade side, a security identifier, a price, and a
14 quantity of shares.

15 6. The method for identifying a price at which to
16 conduct a batch auction of a financial asset according
17 to claim 1, wherein said orders have order types
18 selected from the group consisting of unpriced orders,
19 cross orders, and priced orders.

20 7. The method for identifying a price at which to
21 conduct a batch auction of a financial asset according
22 to claim 6, wherein said cross orders comprise order
23 parameters including a security identifier, and a
24 quantity of shares, and wherein said cross order
25 represents a desire to directly exchange said quantity
26 of shares at the selected price.

27 8. The method for identifying a price at which to
28 conduct a batch auction of a financial asset according
29 to claim 1, wherein said exchanged shares are allocated

1 pro-rata among said orders whose parameters are met by
2 said selected price.

3 9. The method for identifying a price at which to
4 conduct a batch auction of a financial asset according
5 to claim 1, wherein said selecting step is performed
6 according to an algorithm selected from the group
7 consisting of a price discovery algorithm and a
8 reference price algorithm.

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9 10. The method for identifying a price at which to
10 conduct a batch auction of a financial asset according
11 to claim 9, whereby said selected price is selected so
12 as to maximize an amount of exchanged shares.

13 11. A computerized system for identifying a price at
14 which to conduct a batch auction of an asset,
15 comprising:

16 a computerized network having one or more computers
17 in electronic communication with each other;

18 an order receiving program running on one or more of
19 said computers, wherein said receiving program is
20 designed to receive a plurality of messages containing
21 orders from one or more qualified participants;

22 an order book database located on one or more of
23 said computers, wherein said order book database
24 communicates with said order receiving program and
25 stores each of said orders received by said receiving
26 program;

27 a price selection program running on one or more of
28 said computers, wherein said price selection program
29 refers to said order book database and calculates a
30 selected price at which to transact a maximum number of
31 shares of the security during the batch auction;

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1 a batch auction execution program running on one or
2 more of said computers, wherein said execution program
3 executes the batch auction of said maximum number of
4 shares of the security at a given execution time at
5 said selected price, and allocates said maximum number
6 of shares of the security among said accepted orders
7 according to a predetermined criterion.

8 12. The computerized system according to claim 11,
9 further comprising a notification program running on
10 one or more of said computers, wherein said
11 notification program notifies said qualified
12 participants of results of said auction execution
13 program.

1 13. The computerized system according to claim 11,
2 wherein said messages can contain order types selected
3 from the group consisting of unpriced orders, cross
4 orders, and priced orders.

1 14. The computerized system according to claim 11,
2 further comprising an electronic connection for
3 forwarding unexecuted orders to outside markets.

1 15. The computerized system according to claim 11,
2 further comprising communication connections whereby
3 said qualified participants may remotely submit said
4 messages to said order receiving program
5 electronically.

1 16. The computerized system according to claim 15,
2 wherein said qualified participants receive said
3 results of the batch auction electronically from said
4 notification program.

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1 17. The computerized system according to claim 11,
2 wherein said predetermined criterion comprises a pro-
3 rata distribution of said maximum number of said shares
4 among said orders having a price requirement at least
5 as aggressive as said single price.

1 18. The computerized system according to claim 11,
2 wherein said price selection program identifies said
3 single price according to a price discovery algorithm
4 and a reference price algorithm.

1 19. The computerized system according to claim 11,
2 wherein said single price is constrained to lie within
3 the bounds identified by a bid-offer spread of the
4 asset on a market for the asset.

1 20. The computerized system according to claim 11,
2 further comprising an electronic connection to an
3 external data source, said data source providing market
4 information regarding the asset.

1 21. A method for conducting a security batch auction
2 cycle for an asset at a single price, said auction
3 cycle having an order acceptance period, a price
4 discovery period, and an order execution period, said
5 method comprising the steps of:

6 during said order acceptance period, accepting
7 requests to enter auction orders into an order book;

8 during said price discovery period, determining
9 whether said orders will intersect,

10 if said orders intersect, identifying one or more
11 prices at which the batch auction cycle would produce a
12 maximum number of executed shares, selecting one of

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1 said one or more prices as an optimal price, and
2 setting said optimal price as the single price; or
3 if said orders do not intersect, selecting a
4 reference price, and setting said reference price as
5 the single price; and
6 during said order execution period, executing a
7 trade of said maximum number of shares at said optimal
8 price, and allocating said executed maximum number of
9 shares among the orders according to a predetermined
10 criterion.